

# **Listen With Your Eyes Television**

**Report by Mr. Tadashi Takaoka**

**Vice Chairman of Board of Directors of the  
Japanese Organization of CS Broadcasting  
for People with Disabilities**

**Chairman of the Board of Directors of the  
All Japan Association of Hard of Hearing  
People**

I would like to talk to you about the present state of broadcasting for hearing-impaired people in Japan and the challenges we are facing.

First, one problems is that all hearing impaired people, including deaf people, hard of hearing people and people who lost their hearing during the course of their lives, are not always able to access subtitled broadcasting.

A little while ago, the NHK and a private broadcasting company reported on the present state of subtitled broadcasting. They gave us figures for programs suitable for subtitling, which didn't include music programs and live broadcasts. The percentage of total broadcasting hours is 27% for the NHK and about 11% for private broadcasting companies. This information is based on the 2002 survey of the Public Ministry for Management, Home Affairs, Posts and Telecommunication. This figure represents great progress compared with ten years ago, when the figures were in the low single digits or even just a few tenths of a percent, but I still do not think that this is enough.

On the other hand, sign language broadcasting represents just 2.1 percent of programming on the NHK educational channel and only 0.1 percent of programming for private broadcasting firms. There are, however, a great number of hearing-impaired people who cannot understand TV program

with subtitles alone.

Another cause of the first problem is that currently, there are no television sets which are capable of receiving subtitled broadcasting. You may think it is strange, since many subtitled programs have been broadcast, that there are no TV sets to receive them. If you go shopping at appliance stores in famous shopping districts which sell many electrical goods, such Akihabara or Shinjuku, and you say, "I'd like a TV set that can receive subtitles, please" they will tell you that they do not stock them. The only way to obtain them is by ordering them and even then there is a strong chance that they will not be in stock.

This is because Japanese manufactures have stopped producing TV sets capable of receiving analog subtitled broadcasting in response to the beginning of terrestrial digital broadcasting, i.e., the shift from analog to digital broadcasting. Today the Toshiba Corporation is the only company still manufacturing them.

With the shift from analog to digital broadcasting, we would expect to be able to receive both digital and subtitled programming, but it will take a good deal of time, perhaps five or six years, to become reality. My TV set which I bought when I married, sometimes doesn't work. It works when I hit it though. If it breaks down, I cannot get a new to watch subtitled broadcasting. The only thing I can do is to buy a new one and install Eye Dragon, which I will describe later.

The second problem is that programs currently being produced by the country's broadcasters are not responding well to the needs and situation of hearing-impaired people.

One reason is that there is no system to satisfy those needs of hearing-impaired people or to evaluate programming. At present, each broadcaster provides live, subtitled broadcasting, using its own production procedures. The position of subtitles depends on each organization. Even if you prefer the subtitles of a certain company, there is no mechanism for making your views known. Just because subtitles are created in advance it does not necessarily mean that they will be understandable for the hearing impaired.

I think that it is necessary to establish a public organization through which hearing-impaired people can assess TV programs, subtitles, and so on.

As Mr. Terry Riley from the BBC mentioned that in his country, the number of programs where hearing-impaired people appear on camera is still small in Japan. In particular, there are few programs made with hard of hearing people in mind, or in which they appear on camera, despite the fact that there are about six to ten million such people in our society. On the rare occasions in which we can watch such programs, we often find prejudice toward hard of hearing people in them, as when, for example, a hard of hearing person is asked a question again and again.

Another reason is that standards regarding broadcasting of the disabled have been fixed without the participation of people with disabilities. Without asking the opinions of the disabled and the hearing-impaired, broadcasters and manufactures have already set standards for the subtitling of digital broadcasts as well as standards for TV sets which receive digital broadcasting.

Recently, a standard for recording programs has been adopted. It is called the "copy once" format. Under this standard, we may make only one recording of a program, which is extremely inconvenient for the disabled. This was also decided without our input.

Another thing is there is no structure that hearing-impaired people can participate in. Everything is being done for the broadcasters' convenience. It is impossible for us to be involved in decision making about the development of further digital broadcasting programs, or the needs of, and services for, people with disabilities.

The third problem is that there is no system to convey information to all hearing-impaired people in an emergency or when a major disaster happens. It may be possible to add subtitles or to project the conditions using by a telop (television opaque projector), but not all the people understand subtitles. At present, it is impossible to transmit information to all disabled people including the hearing

impaired and the visually impaired.

Next, I will talk about us, the Japanese Organization of CS Broadcasting for People with Disabilities, and about our vision. We established the organization with the intention of managing it by ourselves in order to address problems of broadcasting that the disabled have faced. Our foundation was an important event for the hearing impaired movement in Japan.

A CS station for people with disabilities, Listen With Your Eyes Television, is provided through communications satellite transmissions. It inserts subtitles or sign language into ordinary TV programs, a process called picture-in-picture. Listen With Your Eyes Television is the only station in Japan that has employed the system.

When the World Congress of the World Federation of the Deaf was held in Brisbane, Australia in 1999, we offered sign language and subtitles from Japan by relay. At the Sydney Olympic in 2000, we succeeded in providing broadcasting with subtitles and sign language using the picture-in-picture system.

We have established a system for providing emergency information to hearing-impaired people in the case of a disaster. We developed a system through which, when a disaster occurs in some area in Japan, we can provide subtitles and sign language on ordinary programs from another area via CS transmissions.

In a disaster or emergency, everyone who has a receiver, called an Eye Dragon, can get alarm signals. We can also send these signals to registered mobile phones and personal computers. Through the system, if a disaster occurred in Tokyo, we could convey information to hearing-impaired people in the area or send requests for help or support to other areas. Four experiments with the system have already been successfully conducted: two were by the Japanese Association of the Deaf, and the others were projects of our organization.

At Listen With Your Eyes Television, hearing-impaired

people are producing programs. Our organization is an NPO and one-third of the directors are hearing impaired. We have trained and educated hearing-impaired people as directors and sign language newscasters. Now there are ten directors and 50 sign language newscasters all over the country. Listen With Your Eyes Television broadcasts six days a week, for a total of 17 hours. It also offers its programs to both traditional and cable television stations.

Next I would like to talk about the issues which we will have to address in the future.

The first is the distribution of the Eye Dragon receiver. As of January 2004, 4000 units had been sold. By the end of March, the number will be around five thousand. We plan to increase the number to ten thousand by March in 2005. If we achieve this target, our situation will be greatly improved.

Second, we need to establish a firm financial basis. For this to happen, Listen With Your Eyes Television has to be licensed by government. Because our organization has not yet been authorized as an official station, we cannot apply for broadcasting subsidies.

We need to establish a framework for production of programs. The size of our production staff is very small, which makes it difficult to fulfill various needs. Additionally, we should train and educate subtitle-creators and sign language newscasters, or develop their abilities.

We believe that it is most important that subtitles we create should be understandable and easy to read for hearing-impaired people. We should not interpret all the things that we heard, but rather summarize them into a suitable text with an appropriate number of characters, in order to make them understandable.

We also plan to sell more our programs to many broadcasters.

The third issue is legal preparation. Under the Copyright Law of Japan, broadcasters have to receive permission of insert subtitles and sign language on each program individually, except in the case of Internet and CS

broadcasting. Subtitles and sign language are necessities of life for people with hearing disabilities, and so, we will demand that the law be amended in order to allow us to add them without having to get permission each time.

The fourth topic that I would like to discuss is the development of the next generation of technology. The current climate of Internet and digital broadcasting gives us a challenge of developing new receivers, which are capable of receiving such broadcasters, or which have special functions for receiving Listen With Your Eyes Television. We are now addressing another pressing issue, the location of the broadcasting satellite located at 144 degrees east, which we are using to broadcast Listen With Your Eyes Television. The satellite which broadcasts BS and digital programming is at 110 degrees East. If we were able to move our satellite to 110 degrees East, both BS (the major satellite broadcasting satellites in Japan) and Listen With Your Eyes Television would be receivable with just one antenna.

Listen With Your Eyes Television is now growing, and is providing many chances for hearing-impaired people to operate and produce programming by themselves. Our programs and production procedures will become important models in the digital broadcasting and Internet broadcasting era.

I hope that we will continue to receive your support in the future. Thank you very much.

## **Comments by Coordinator, Mr. Akiyama**

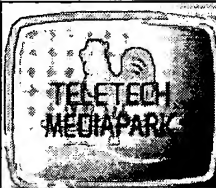
Mr. Takaoka has just made a lot of suggestions.

One is to have, or make, hearing-impaired people participate in production or organization of programs.

Another is about subtitles and sign language on programs in a disaster of emergency.

I have been asking you to submit questionnaires since yesterday. Some of you asked the same kind of questions.

Today we have time for free discussion with panelists, and I expect that you will review and discuss these questions with participants from other countries.

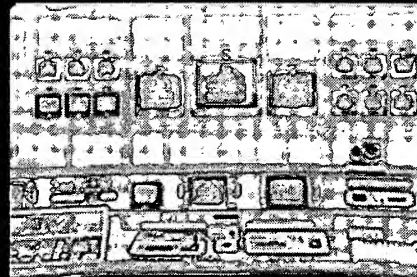

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## Edit Suite Digital Composite/Digital Component


[Edit Suite 1-2](#)
[Edit Suite 3](#)
[Edit Suite 4](#)
[Edit Suite 5](#)
[Edit Suite 6](#)

### Edit Suite 1&2 *Digital Composite*

This is a composite digital editing room using the GVG-3000 digital switcher as its core. Edit Suite 1 is equipped with the A-57 DVE; and Edit Suite 2 with the ADO-500 DVE.


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Vision Mixer	GVG	Model3000
DVE	ABEKAS	A-57
	AMPEX	ADO-500
Audio Mixer	GPS	D/ESAM800
D-2 VTR	SONY	DVR-28
	AMPEX	VPR-300
βcam-SP VTR	AMPEX	CVR-65/75
Color Corrector	SONY	BVX-D10
Opaque Cam.	Ikegami	TGC-110
Telop System	Videotron	AW-900/896E
		TW-425/TF-854
Editor	GVG	VPE-251

### Edit Suite 3 *Digital Component*

This is a composite digital editing room using Sony's DVS-8000 digital switcher. It is possible to use up to four channels with the DME-5000 and ADO-500 DVEs.


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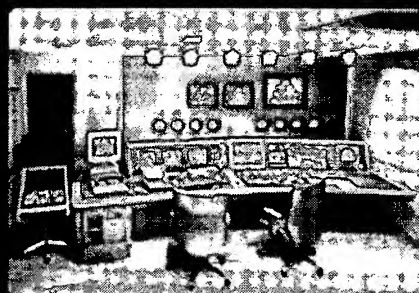
Vision Mixer	PHILIPS	DD-35
DVE	Accom	DVEOUS
Audio Mixer	GPS	D/ESAM400
D-βcam VTR	SONY	DVW-A500



βcamSP VTR	AMPEX	CVR-65/75
Opaque Cam	Ikegami	TGC-110
Telop System	Videotron	AW-910
		TW-428
Editor	SONY	BVE-9100
Chara Gen.	Pinnacle	DEKO 500

### Edit Suite4 *Digital Component*

Using Abekas A-8150 component digital switcher as its core, the system has a two-channel DVEOUS DVE that features high-grade, multiple functions. It is now possible to obtain an even wider variety of images thanks to the Macintosh-platform character generator and RTD 4224 disk recorder.

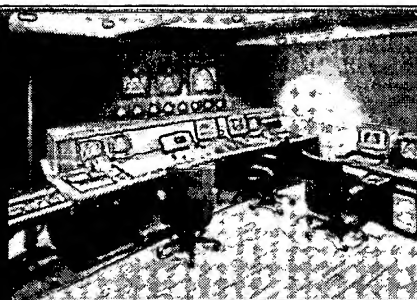


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Vision Mixer	Abekas	ASW-8150
DVE	Abekas	DVEOUS
Audio Mixer	GPS	D/ESAM400
Digital βcam VTR	SONY	DVW-A500
βcam-SP VTR	SONY	BVW-75
D-2 VTR	SONY	DVR-28
DDR	ACCOM	RTD-4224
Opaque Cam	Ikegami	TGC-111
Telo System	Videotron	AW-890D1/896E
		TW-428
Chara Gene	Pinnacle	DEKO 500
Quality Adviser	HP	QA-100
Editor	ACCOM	AXIAL2010

**Edit Suite5** *Digital Component*

Using Sony's DVS-7250 component digital switcher, the system provides two channels of the latest DME-7000. With its Type Deko character generator using the Windows NT platform, you can now create colorful television opaque projector (telop) effects.



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Vision Mixer	SONY	DVS-7250
DVE	SONY	DME-7000
Audio Mixer	SONY	DMX-E3000
Digital Bcam VTR	SONY	DVW-A500
D-2 VTR	SONY	DVR-28
DDR	Sierra	DiscoveryPlus
Opaque Cam	Ikegami	TGC-111
Telop System	Videotron	AW-910
		TW-428
Chara Gen.	Pinnacle	Deko 1000
Quality Adviser	HP.	QA-100
Editor	SONY	BVE-9100

**Edit Suite6** *Digital Component*

It doesn't get any better than this if you are looking for an edit suite capable of digital post production. This fully digital component system includes total of six decks; three Digital BetaCam decks, one BetaCam deck, and two D-2 decks at all times. It also offers TypeDecko character generator which is very popular in Edit Suite 5, with the FX-DEKO 3D plug in. And last-but-not-least, the room is very spacious, giving you enough room to expand your creativeness.



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► Panorama

Vision Mixer	SONY	DVS-7200A
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DVE	SONY	DME-7000
Audio Mixer	GPS	D/E SAM400
Digital βcam	SONY	DVW-A500
βcam-SP	SONY	BVW-D75
D-2VTR>	SONY	>DVR-28
Opac Cam	JVC	AV-P900
DSK System	VIDEOTRON	AW-910
Hirop Corre	VIDEOTRON	TW-428
Chara Gen	Pinnacle	FX-DEKO
Quality Adviser	HP.	QA-100
Editor	SONY	BVE-9100